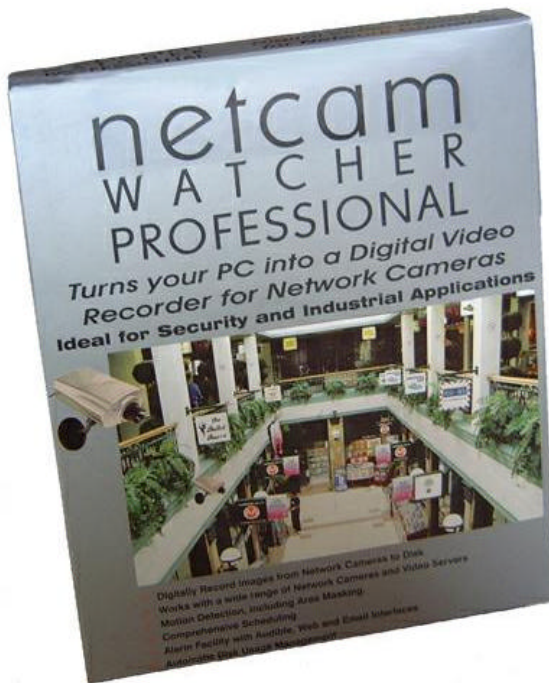


netcam WATCHER PROFESSIONAL



USER MANUAL

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Version 2.0.1 5-March-2007

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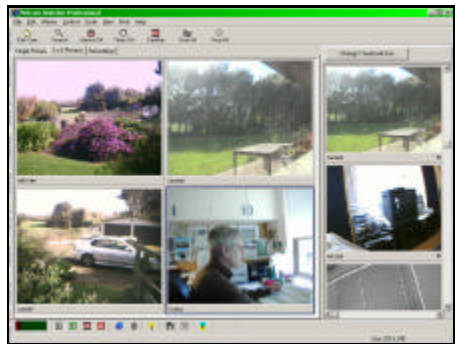
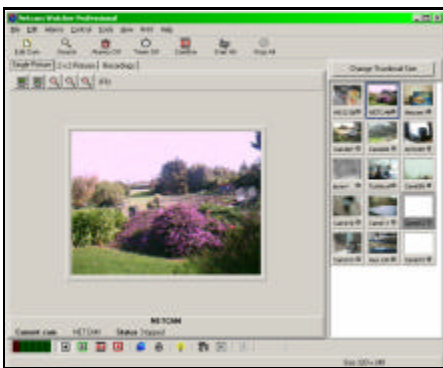
Getting Started

Overview

Netcam Watcher Professional is a full-featured Digital Video Recorder for Network Cameras that can record from multiple cameras simultaneously. It can also record from IP camera servers, conventional snapshot webcams, and Webcam32 streaming webcams.

In addition it provides a host of other features, including motion detection, alarms, scheduling, archiving and patrolling.

The main display can be configured in many different ways. See below for a couple of examples



The left view shows the selected cam on the left, with small thumbnails on the right.

The right view shows the multi cam screen, with larger thumbnails. You can also turn off the thumbnails completely.

Main Features

Here is a summary of the Main Features of *Netcam Watcher Professional*:

- Easily reconfigurable display lets you see as many cameras as you like. Includes a new multi-camera display (previously a 2x2 display, but now can be configured any way you like.)
- Masked motion detection allows precise control over frame recording and alarms.
- Cameras can operate according to easily defined schedules (e.g. "Office Hours").
- Alarm facility that lets you, for example, e-mail image when alarm occurs or camera goes offline.
- Patrol function lets you automatically pan the camera to preset points at certain intervals. This can also be scheduled.
- Multi-cam display can rotate cameras automatically, to show first set, second set, and so on.
- Remote access supported via Netcam Watcher Remote Control program.
- Disk space management optionally removes (or archives) old recordings to allow for continuous operation.
- Archive facility to save images before they are overwritten.
- Backup facility to save all your configuration and recordings at fixed times (e.g. daily or weekly)
- CamBar lets you keep a subset of cameras on screen at all times.
- Print utility allows multiple images per page to be printed.
- Pan/Tilt/Zoom support.
- Built-in MJPEG player lets you view recorded images and display each frame's timestamp.
- Stand-alone MJPEG player also available as a free download.
- Programmable captions can be put on pictures
- FTP latest images or alarms to a remote host.
- Administrator and / or User level security settings.
- Convert recorded MJPEG files to AVI format.
- Image enhancer for poor quality or lighting.
- Search archived images and display motion graphically.
- Instantly jump to a particular motion event.

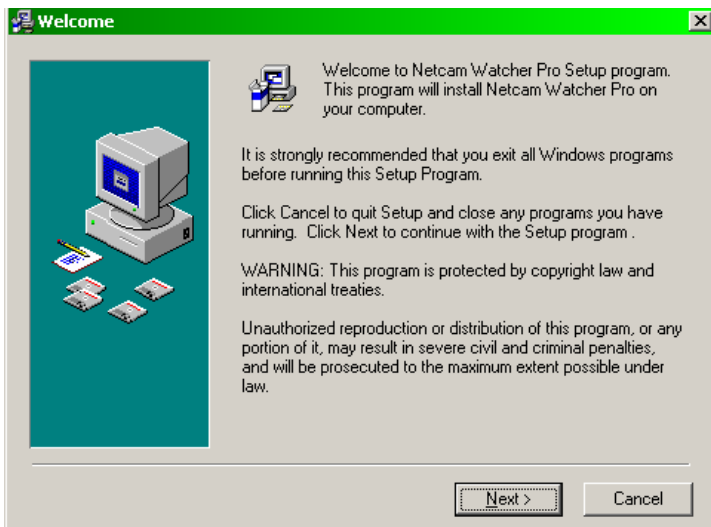
Installing Netcam Watcher Professional

Netcam Watcher Professional is normally supplied on CD. To install, insert the CD and the installation process should automatically start. Alternatively it is downloaded from the Internet, in which case you need to open the downloaded installation file.

If it does not automatically start, open **My Computer** and located the CD drive and double click.

If you downloaded from the Internet, save the file that you downloaded and then open it when the download is complete.

Installation is straightforward.



This is the initial screen of the Installer. Click **Next** to start the installation and then follow the on-screen instructions.

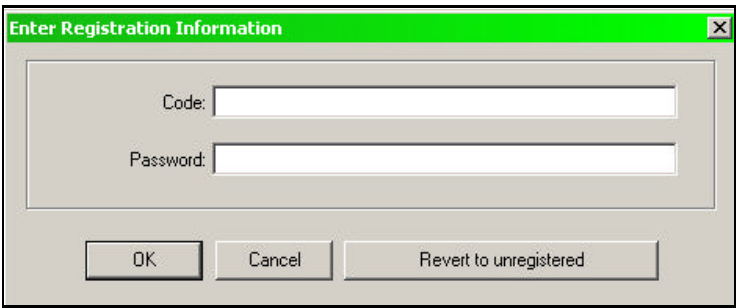
Registering Netcam Watcher Professional

Netcam Watcher Professional is licensed according to the maximum number of cameras that can be used.

When first installed, *Netcam Watcher Professional* runs in *demo* mode. This has full functionality but only allows a maximum of 4 cameras.

To unlock *Netcam Watcher Professional* you need to enter the **Code** and **Password** that was supplied to you.

To do this, run *Netcam Watcher Professional* and select **Help** then **Enter Registration Code** from the main menu at the top of the screen.



If you reinstall *Netcam Watcher Professional* or **Windows** then you will need to repeat this procedure, so it is important to keep your registration code in a safe place.

It is recommended that you make a note of your codes here:

CODE:.....

PASSWORD:.....

System Requirements

Netcam Watcher Professional requires Windows 98, ME, XP, 2000, 2003 or Vista with a minimum of 256MB of RAM and SVGA display (1024x768) or better.

For serious use you should consider using Windows 2000, XP or Vista with 512MB or more of RAM.

The amount of disk space required depends entirely on how much you want to record, how many cameras you have, what frame rates you use, and many other factors. For assistance in determining your disk space requirements, contact your distributor.

Cameras Supported

This is a partial list of cameras that have been tested with *Netcam Watcher Professional*:

- **Axis** Network Cameras (eg 2100) and Servers (eg 2400)
- **Intellinet** Network IP Cameras
- **VivoTek** Network Cameras and Camera Servers including MPEG4
- **Panasonic** WV-NP472, WJ-NT104, WV-NS324 and HCM Range
- **Toshiba** IK-WB range
- **Canon** VB-C10
- **VEO Observer**
- **Mobotix**
- **Linudix** Wisecam
- **D-Link DCS -1000, 2000, 5300, etc**
- **IP Kamera 9000 and IP Kamera servers**
- **JVC VN-C2WU**
- **Stardot Netcam**
- **Orite** network camera
- **Sony** SNC-RZ30
- **TRC network cameras**
- **Yoko** video server
- **Webcam32** streaming format cameras.
- **Video for Windows devices** like standard webcams and video capture cards. Note that only one VFW device can be used.
- Any **Netscape**-style Motion JPEG streaming camera.
- Any network snapshot camera that uses JPEG images. This includes most webcams on the Internet.

We are adding new cameras all the time, so please check with us if your device is not on this list.

Netcam Watcher Professional has the ability to define new camera types, so some cameras can be supported simply by defining the correct URLs.

New in version 2.0

Here is a list of the main changes in this version:

- ***Pre-triggering*** Now you can record for a specified amount of time *before* motion occurs (as well as after motion ceases)
- ***Random Patrolling*** makes patrolling hard to second guess. When enabled, camera moves from one patrol position to another in a random manner.
- ***AlwaysUp Included with registered version.*** When you register (ie purchase) a licence for Netcam Watcher Professional, a full copy of the ***AlwaysUp*** utility is included free.
See www.coretechnologies.com/products/AlwaysUp/ for details.

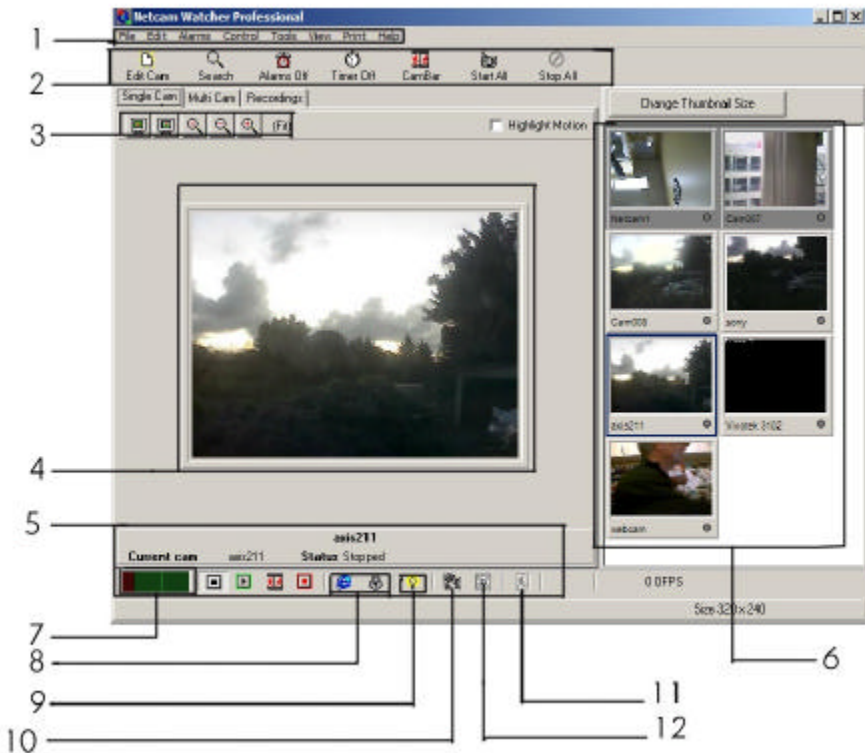
AlwaysUp allows you to run Netcam Watcher as a windows service, and helps ensure that Netcam Watcher is “always up”

AlwaysUp can:

- start Netcam Watcher on system start
- monitors Netcam Watcher and restarts it if it fails, becomes unresponsive, hogs the CPU or otherwise misbehaves
- dismiss any error dialogs
- restart at regular intervals

Note that AlwaysUp does not currently work with Vista. This is more a limitation of Vista, in that it does not allow Windows Services to interact with the desktop.

Main Screen

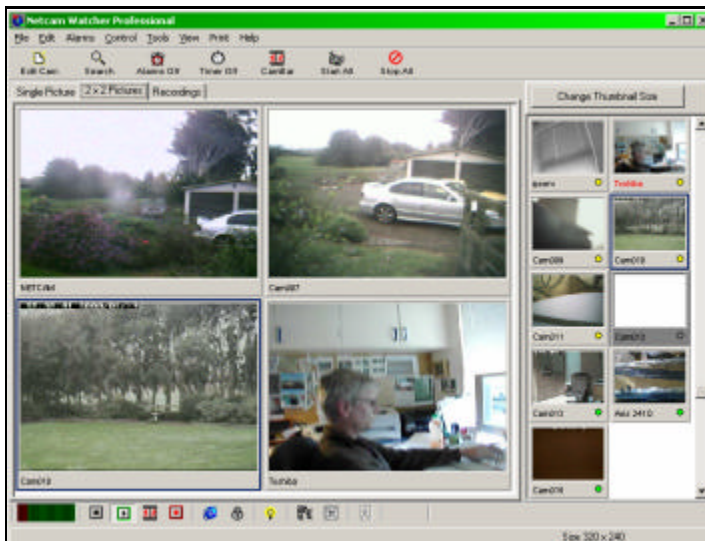


1. **Main Menu.**
2. **Main Toolbar.** Common commands. Timer and Alarm switches.
3. **Image Zoom Controls** These allow you to magnify or reduce the current image
4. **Image for Current Camera.** Shows the current image for the selected camera. If the camera is not currently running it shows the last saved picture.
5. **Camera Status and Control Toolbar.** Controls to start and stop recording the current camera.
6. **Camera Thumbnails** Shows the last picture for every camera. Use this panel to select a camera.
7. **Motion Detection Bar** Shows the amount of motion detected. Click here to alter the motion settings

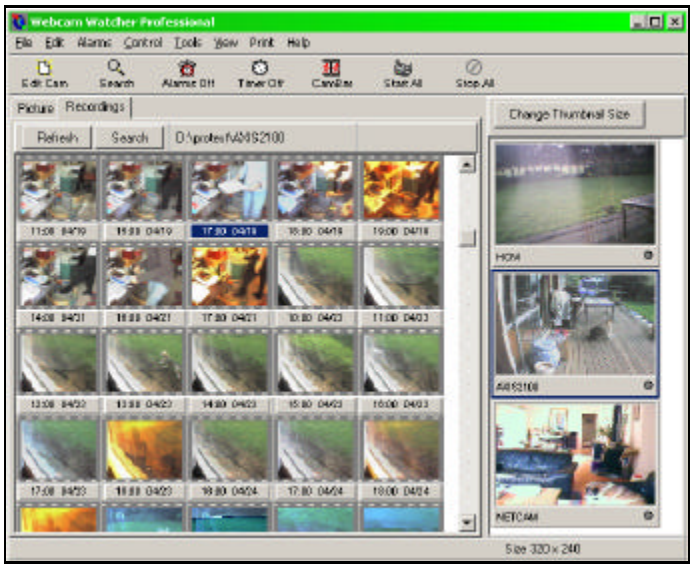
8. **Camera Access Buttons** Allows one-click access to the current camera's homepage and admin page.
9. **Image Enhancer** Dynamically enhances images. Special enhancement for low light conditions. Right click to adjust.
10. **User Defined Controls** On/Off
11. **Patrolling** On/Off
12. **Pan/Tilt/Zoom** Shows or Hides the Pan/Tilt/Zoom control panel.

Clicking the **Multi Cam** tab shows the Multi Cam View. Initially this shows the first four cameras but you can select any cameras you like by dragging from the thumbnails panel to the location you want. You can change the number of rows and columns on the **File > Preferences** dialog

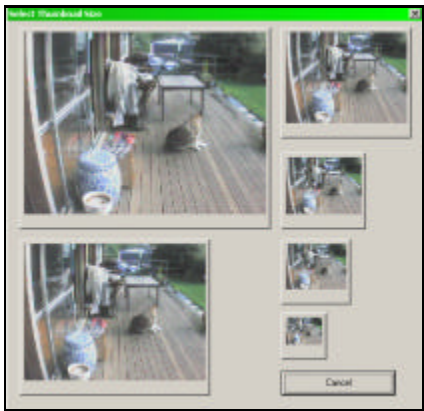
You can check the **Rotate Pictures Every XX seconds** checkbox to rotate through all your cameras.



Clicking the **Recordings** tab shows the recorded MJPEG files for the current camera. You can view a recording by double-clicking it.



You can change the size of the **Camera Thumbnails** by clicking the button at the top of the panel.



You can also turn off the thumbnails entirely by selecting **View > Show Thumbnails** from the main menu. This can improve performance if you have lots of cameras.

Configuring Cameras

Selecting a Camera Folder

Netcam Watcher Professional uses a Camera Folder to store details of your cameras, and to store recordings. You can select the location of the camera folder by using **File > Select Camera Folder** from the main menu.

Initially the camera folder is set to be the same as the program folder. Unless you want to store your camera database here, it is a good idea to change this before creating any cameras.

New Camera / Edit Camera Dialog

To create a new camera, select **Edit > Create New Camera** from the main menu. This opens the **Edit Camera** dialog. You can also edit an existing camera by selecting the camera and clicking the **Edit Camera** button.

Edit Camera

Camera Details | Recording and Saving | Schedules and Patrolling | Advanced

Camera Details

Camera Name: AVOS2100

Description: AVOS Test Camera

Location: Outside

Camera Address: 192.168.0.239

Camera Type: Axis 2100

Camera Channel: []

Define

Monitoring Type

☒ Full Motion ☐ Snapshot Interval: 0 seconds

Image size: Large Image quality: Normal ☐ Flip

Security

Use Authentication: ☒ User ID: username Password: []

OK Extra Functions Alarm... FTP... Cancel

Camera Details

This section lets you define the Camera's and characteristics:

- **Camera Name** A short name used for tagging the thumbnails. Also used for camera sub-folder name.
- **Description**: Optional longer description.
- **Location**: Optional location string.
- **Camera Address**: IP address of camera. This can be a dotted IP address like:
192.168.0.253 or it can be a named address:
camera1.mydomain.com. ...or a non-standard port:
camera.mydomain.com:8080
- **Camera Type**: Select from one of the predefined types or choose **User Defined** (in which case you can click the **Define** button to define the camera's URLs)
- **Camera Channel**: For camera servers, select the channel number here.

Setting Up a Video for Windows Device

Select one of the Video for Windows supported devices, like **Standard Webcam** or **Video for Windows Device**.

Three new buttons will appear that allow you to configure the device:

- **VFW Driver** lets you select which of the available drivers to use
- **VFW Source** lets you select the device to be used if more than one VFW device is installed. There may also be other options on this dialog depending on the actual device in use.
- **VFW Format** lets you select the size of the image and other properties of the device.

All three of these dialog may vary depending on which VFW devices are installed.

NOTE: Only one Video for Windows device can be used. Attempting to use more than one will lead to unpredictable results.

Monitoring Type

This section lets you specify how the image is fetched from the camera, and the image size and quality.

- **Full Motion** means that the camera is sending a stream of images.
- **Snapshot** means that *Netcam Watcher Professional* fetches a snapshot at regular intervals. The interval can be less than a second, or even zero.
- **Flip** if checked displays the image upside down

Note that some on cameras, only Full Motion or Snapshot will be available. This depends on how the camera operates and communicates.

On cameras that only support Snapshot mode, setting an Interval of zero will often produce results similar to Full Motion (i.e. several frames per second)

Security

If the camera needs a **Username** and **Password** to view the image, you need to enter them here, and check the **Use Authentication** box.

Recording and Saving

The screenshot shows the 'Edit Camera' dialog box with the 'Recording and Saving' tab selected. The dialog has a green title bar and a close button. It contains several sections for configuring recording settings:

- Default Saving Mode and Location:** Includes radio buttons for 'Monitor only', 'Record on motion' (which is selected), and 'Record every frame'. Below is a 'Data Folder Path' text field and a 'Browse...' button.
- Motion Detection Settings:** Includes a checked 'Use Mask' checkbox with an 'Edit Mask' button. To the right, it says 'Record for 5 seconds after motion stops'.
- Disk Usage:** Includes radio buttons for 'No Limit', 'Delete old files when 50 MBytes used', and 'Delete old files when 4 Days old' (which is selected).
- CPU Throttle:** Includes a 'CPU Throttle 0 fps' setting.

At the bottom of the dialog are five buttons: 'OK', 'Extra Functions...', 'Alarms...', 'FTP...', and 'Cancel'.

When you Start All cameras, the camera is started in the mode specified here:

- **Monitor:** The camera is running (in other words, *Netcam Watcher Professional* is fetching pictures) but no pictures are saved.
- **Motion Detect:** The camera is running and saving frames where motion is detected.
- **Record Every Frame** The camera is running and every frame is recorded.
- **Data Folder Path** specifies where you want to store the recordings. If you leave this blank the recordings are stored in a sub-folder in your main camera folder.

Motion Detection Settings

This lets you configure settings relating to motion detection:

- **Use Mask:** If checked then the motion detection mask for this camera is used.
- **Edit Mask:** Click to edit the mask
- **Record for XX seconds:** You can specify how long recording continues after motion has stopped being detected, or before motion has started.

Disk and CPU Usage Limits

Netcam Watcher Professional can limit the amount of Disk and CPU that a camera uses.

If you enable automatic disk space management (by checking the **Limit Disk Usage** checkbox) then *Netcam Watcher Professional* will delete old MJPEG files if the limit specified here is exceeded.

You can either specify a number of days, or a number of megabytes

If you specify a non-zero value for **CPU Throttle** then *Netcam Watcher Professional* will sleep for this period of time after each frame is received from this camera.

Scheduling and Patrolling

You can specify a **Schedule** to use for this camera. See the section on **Schedules** to see how this works.

Patrolling

Patrolling works by panning the camera from one preset position to the next, with a defined interval in between. For this function to be available, your camera must support pan/tilt presets. Most cameras that can pan also have presets.

You specify here the **Interval** and the **Number of presets** that you want to patrol. To start Patrolling, click the Patrol button on the lower toolbar (the right-most button).



Patrol Button

You can also specify a **Patrol Schedule** to use for this camera. See the section on **Schedules** to see how this works. Basically, the patrol schedule specifies when patrolling is on or off. Note that Patrol Schedules (like regular schedules) only operate when the **Timer** button is down.

You can also specify a preset location to go to for a particular half-hour slot, so for example you can have the camera on preset #2 from 9am to 5pm, then preset #3 from 5pm to midnight.

Note that whenever patrolling is finished, either by schedule or by clicking the Patrol button, the camera returns to preset #1.

If Random Patrolling is checked, the camera does not move from preset #1 to #2 to #3 in a regular manner, but instead selects a random preset after the patrol interval expires.

Advanced Tab

This lets you set up TCP Port Activated Motion Detection. This is used by some Axis devices such as the 241Q Video Server.

In this scheme, motion detection is performed by the device rather than by Netcam Watcher. The device sends a TCP message to a specific port when motion starts and stops. Netcam Watcher can start and stop recording on receipt of these messages.

Some points to note when using this feature:

- Each camera must use a separate TCP port, and this must match the server port defined in the device.
- The messages set up in the device must match the messages in this dialog. Suggest you use messages like **CAM1 ON...CAM1 OFF**, etc
- When **Use TCP Motion Detection** is checked, this is activated when the camera is in motion detection mode. In this case, no current image is shown, but the Netcam Watcher waits for a TCP control message to start and stop recording.
- When the camera is in Monitor or Record All Frames mode it operates normally
- It is advisable to use this feature in conjunction with the *Record for XX seconds after motion stops* (on the Recording and Saving tab). This prevents dropped frames when the motion starts and stops rapidly.

If you check **Monitor when no motion** then snapshots are retrieved at the interval specified here. This is useful to keep an eye on the camera when there is no motion, also it acts as a watchdog, producing offline notifications if communication with the camera is lost.

Please contact support if you need help getting this feature to work.

Extra Functions

User-defined Extra functions can be useful for providing additional functions like activating switches or browsing to a related web page.

You can specify up to 16 extra User Defined Functions for a camera. These are URLs that can be accessed by clicking the **User Defined Functions** button on the **Camera Status and Control Toolbar**.

For each extra function you can specify a Name, URL and Hint. The name is displayed on the extra function button.

If the URL starts with "http" then a direct address is assumed. Otherwise the URL is constructed by appending the string to the camera's Address. Note : No leading "/" is required.

If **Browse To** is checked, a Browser window is opened to the specified URL.

Otherwise *Netcam Watcher Professional* simply fetches the URL internally (i.e. it issues a http GET). Any errors are ignored.

FTP Settings

This opens the FTP settings dialog that allows you to set up this camera to send pictures or alarm pictures to a remote host. See the **Using FTP** section for more information.

Preset Names

Click the **Preset Names** tab on the main Edit Camera dialog to associate names with preset positions. This tab will only be visible if the camera supports preset positions.

Some cameras allow you to also enter preset names into the camera. *Netcam Watcher Professional* does not retrieve these names, so it is up to you to make sure that any names in the camera match the names you set up here.

Some newer Axis products (eg 213, 241) use preset names instead of numbers. For these devices it is important that you set up the preset names here to be exactly the same as the preset names in the Axis device, otherwise they will not work.

Note: For these Axis devices, if a preset name (in the camera) contains spaces, you should replace the spaces with a plus sign (+), for example:

Axis Name : Back Yard should be specified as Back+Yard

Defining Camera Types

You can add new camera types to *Netcam Watcher Professional* using the **Edit Camera Definitions** dialog.

The screenshot shows the 'Define Camera Type' dialog box. It is organized into several sections. The 'Camera Details' section includes fields for 'Camera Type Name' (Avis 2100), 'Snapshot URL' (a://cgi/psp/image.cgi), 'Motion Image URL' (a://cgi/psp/video.cgi), 'Motion Image Protocol' (Push (Normal Streaming) with a dropdown arrow and a 'Use Defined Functions...' button), 'Homepage URL', and 'Config URL' (a/dm/a/dm/stand). The 'Image Size' section has a checked 'Variable size images' checkbox and three URL fields for 'Small size URL' (7 resolution=320x240), 'Medium size URL' (7 resolution=320x240), and 'Large size URL' (7 resolution=640x480). The 'Image Quality' section has a checked 'Variable quality images' checkbox and three URL fields for 'Low quality URL' (5 compression=60), 'Normal quality URL' (5 compression=40), and 'High Quality URL' (5 compression=20). The 'Multi Channel Devices' section has an unchecked 'Multi channel' checkbox, a 'Number of channels' spinner set to 1, and a 'Channel select URL' field. At the bottom are three buttons: 'Load definition...', 'Save definition...', and 'Close'.

Load Definition loads an existing Camera Definition.

Save Definition lets you save a definition. This then becomes available on the *Edit Camera* dialog.

Camera Definitions are stored in files with the extension **.CDF**

For detailed information about how to define camera types, contact Beausoft Technical Support, support@beausoft.com

Monitoring and Recording

The **Camera Control Toolbar** lets you control the current camera.



1 2 3 4 5 6 7 8 9 10 11

1. **Motion Detection Bar** shows the amount of motion currently detected. Clicking on this allows you to adjust the motion detection settings for the current camera.

Then there are four VCR-style buttons to control the camera:

2. **Stop** button
3. **Monitor** button – show live images, but don't record
4. **Motion-Detection** button – record on motion
5. **Recording** button – record every frame

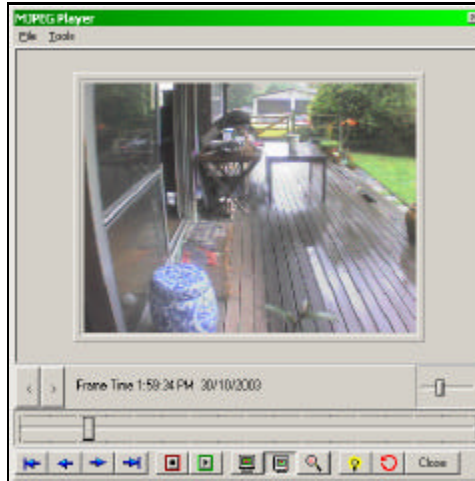
And some other buttons:

6. **Camera Home Page** button
7. **Camera Admin Page** button
8. **Image Enhancer On/Off**. Right click to Adjust
9. Show / Hide **User Defined Functions**
10. Show / Hide **Pan/Tilt/Zoom controls**
11. Start and Stop **Patrolling**

When *Netcam Watcher Professional* records images, it records into MJPEG files (Motion JPEG).

One file is created per hour. All frames recorded for that hour go into that file. You can see the MJPEG files saved using the Recordings tab. If you double click on a recording it plays it in the MJPEG Player.

MJPEG Player



If the recordings that *Netcam Watcher Professional* makes are like videos, then this is the Video Player. The VCR-style buttons at the bottom let you start and stop playing.

The blue arrows let you go to the start and end of the recording. Also forward and back single frames.

The lower slider lets you set the position anywhere in the recording.

The < and > buttons take you to the previous and next MJPEG files.

The small slider on the right hand side controls the playback speed.

The Main Menu on the MJPEG Player lets you perform additional functions:

- **Save** the current MJPEG file
- **Copy** or **Save** the current frame
- **Print** the current frame
- **Extract** the individual JPEGs from the MJPEG file
- **Convert** the MJPEG file into an AVI file

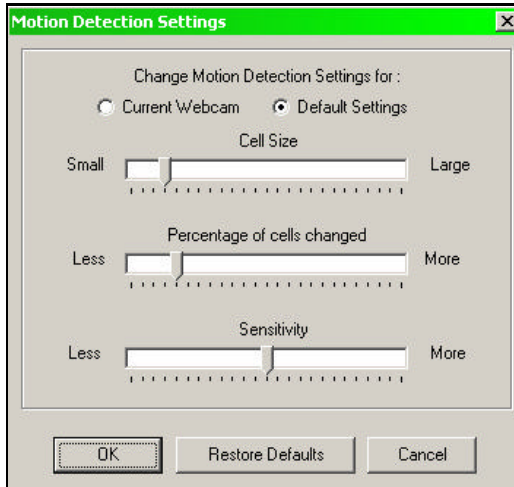
The last option, **Convert to AVI**, uses the codecs that are currently installed on your system. Not all codecs perform as expected.

Hint: Press *Escape* to close the MJPEG player.

Motion Detection

When a camera is running, *Netcam Watcher Professional* is constantly comparing frames, looking for motion. It displays the amount of motion on the **Motion Detection Bar** at the bottom of the screen.

You can adjust the motion detection settings by clicking on the bar graph.

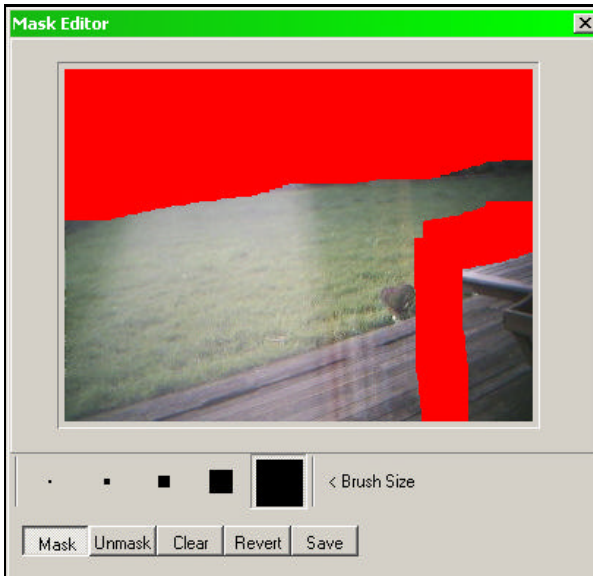


There are three sliders that let you control three parameters:

- **Cell Size.** The picture is divided into square cells, and each cell is compared. This slider controls how large the cells are. This can range from 4x4 pixels to one large cell that covers the whole picture. Smaller cell sizes mean more CPU required, but better motion discrimination.
- **Percentage of cells changed** determines how many cells need to be changed before the picture is considered different. This slider adjusts the position of the red and green bars on the *Motion Detection Bar Graph*.
- **Sensitivity** controls how sensitive to motion the bar graph is.

Motion Detection Mask

Motion Detection can be restricted to a certain area by using a ***Motion Detection Mask***. You can edit a camera's mask by selecting the camera and choosing ***Edit Motion Detection Mask for Current Camera*** from the ***Edit*** menu.



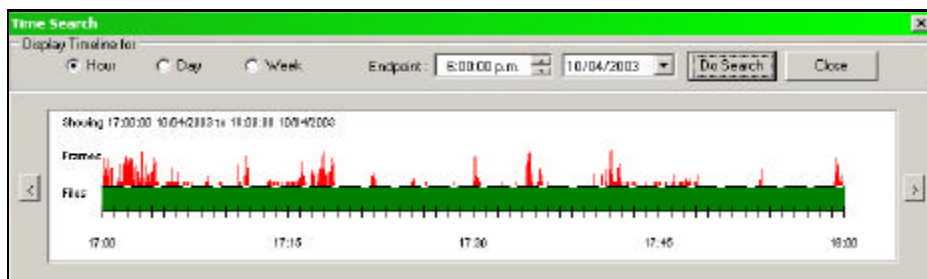
The Mask Editor is easy to use. Select either ***Mask*** or ***Unmask*** and the brush size.

The ***Red*** area defines the masked area, which is ignored when detecting motion.

The ***Motion Detection Mask*** is *enabled* and *disabled* by the ***Use Mask*** checkbox on the ***Edit Camera*** dialog.

Searching

Netcam Watcher Professional lets you search for motion graphically. Click the **Search** button to open the Search dialog.



The **Green** area (below the line) shows the presence or absence of MJPEG files that cover the time period. Note that if motion recording is used and no motion is detected in a particular hour then no recording will be present.

The **Red** area (**above** the line) shows where frames have been recorded. If Motion Detection recording was used, this gives a graph of the motion detected.

Select the **Endpoint** for the search, Select the period, Hour, Day or Week, and click **Do Search**. The results are displayed. (Note: this may take some time).

You can double click on the results to open the corresponding MJPEG file at the correct place.

Right clicking opens a menu that lets you:

- **Open in MJPEG Viewer** (same as double clicking)
- **Set Endpoint Here** – sets the end of a subsequent search where you click.

You can also click the < and > buttons to perform searches for the previous and next periods.

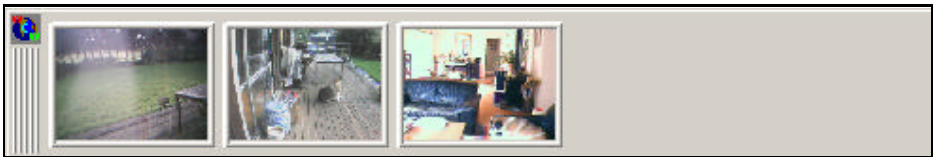
The CamBar

Netcam Watcher Professional's **CamBar** lets you keep some or all of your cameras on-screen (much like the Windows taskbar). This remains visible even when *Netcam Watcher Professional* is minimized.

To Open the CamBar click the **CamBar** button.

The CamBar will open at the top of your screen. Initially it will be empty.

You can drag cameras from the **Thumbnails** to the CamBar and drop them.



The CamBar can be dragged to dock on any edge of the screen. It can also be made to float anywhere on the screen. Move the CamBar by dragging the *handlebars*, the thin vertical bars at the left of the CamBar.

Clicking on a camera on the CamBar restores the main screen and selects the camera. When motion has been detected on a camera, its thumbnail changes color.

Right click on a camera and a menu opens that lets you:

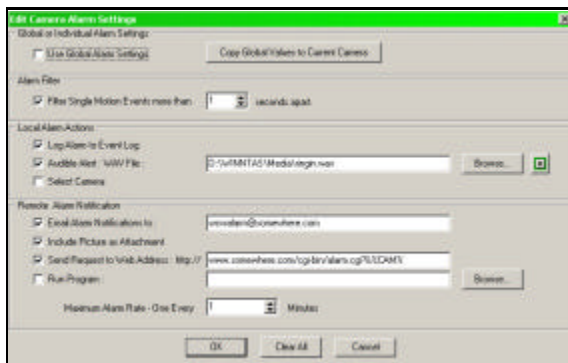
- Start or Stop the camera
- Edit the camera
- Remove the camera from the CamBar
- Open the camera's homepage
- Copy the current image to the clipboard

Clicking on the CamBar Icon opens a menu that lets you:

- Start or Stop all cameras
- Start or Stop all cameras on the CamBar
- Empty the CamBar
- Close the CamBar
- Quit the program

Alarms

Netcam Watcher Professional includes an Alarm facility. Alarms are generated when more than a certain amount of motion occurs and/or when a camera goes offline (i.e., communications is lost). The Alarms for a camera are configured by clicking the **Alarms** button on the **Edit Netcam** dialog, or by selecting **Edit Alarms for Current Camera** from the **Edit** menu.



The top panel, **Global or Individual Alarm Settings** selects whether you use the default settings for this camera, or use individual settings.

You can *Copy* the current global settings by clicking the button in this panel.

The **Alarm Filter** panel enables *single event filtering*. If enabled, more than one motion event is required to trigger an alarm. The time box lets you specify how far motion events must be apart to be considered single events.

The **Generate Alarm if Camera Offline** checkbox enables the alarm when communications with the camera is lost.

The **Local Alarm** panel lets you configure alarms that produce actions on the PC that *Netcam Watcher Professional* is running on:

- Log to Alarm Log
- Play a sound
- Select the camera

You can view the Alarm Log using **Show Alarm Log** on the **Alarms** menu.

The **Remote Alarm** panel lets you configure alarms that can send messages, etc:

- Email Alarm Notification to a specified e-mail address. To send to multiple recipients, separate the different email addresses by commas. The default message sent is

Motion detected on <CAMNAME> at <SHORTTIME> on <SHORTDATE>

(Note the replaceable parameters; the same as used on **Captions**). You can change the message if you like.

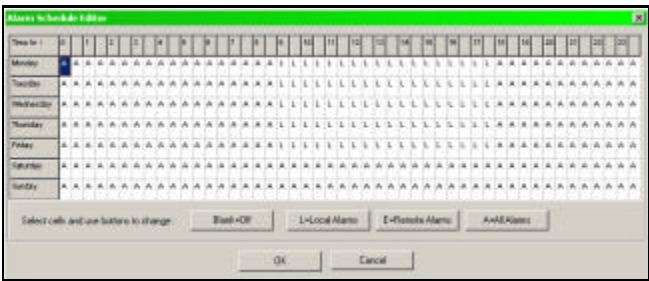
- Attach the last image to the e-mail message
- Send GET request to a particular web address. The URL specified can have expandable parameters: %CAMNAME% for the camera name. %CAMNUM% for the camera number.
- Run an external program, passing the camera name and camera number as parameters.

For Email Alarms to work you must set up an SMTP mail server on the main **Preferences** dialog.

There is a **Maximum Rate** that can be set for remote alarms, to prevent too many being generated.

Note that Alarms are only generated when the Alarms button on the main Toolbar is down.

Alarms can be set according to an **Alarm Schedule**. This operates similarly to regular schedules. Edit this using **Edit Alarm Schedule** on the **Alarms** menu.



This defines a schedule of when the Alarms (local and/or remote) should be Enabled or Disabled. **Like regular schedules, the Alarm Schedule only operates when the Timer button on the main toolbar is down.**

Schedules

Netcam Watcher Professional includes a scheduling facility.

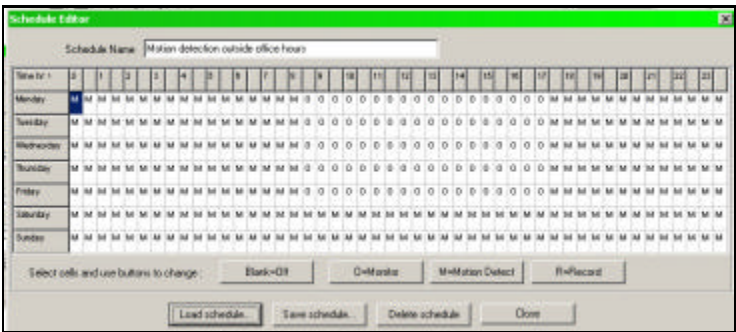
This lets you set schedules for each camera to be running or recording. Think of this as similar to setting programs on a video recorder. (You can also set Alarm and Patrolling schedules).

To actually **Run** the schedules (i.e. make them active), the **Timer** button on the main toolbar must be Down. This is analogous to pressing the **Timer** button on a video recorder.

Some things to note about the **Timer** button on the main toolbar:

- If you quit *Netcam Watcher Professional* with the **Timer** button down, it will be down when the program next starts.
- You can force the **Timer** and/or **Alarm** buttons to be down on program start-up by selecting this on the main **Preferences** dialog.
- You can force the **Timer** and/or **Alarm** buttons to be down on program start-up by passing the parameters **-TIMER** and/or **-ALARMS** when running the program.
- Pressing the Timer button down will start scheduling; this may cause cameras to start or stop.
- Pressing the Timer button up will stop scheduling, but will not cause cameras to start or stop. They simply carry on as they were.

You can Create and Edit schedules using the Schedule Editor. Select **Edit Schedules** from the **Edit** menu.

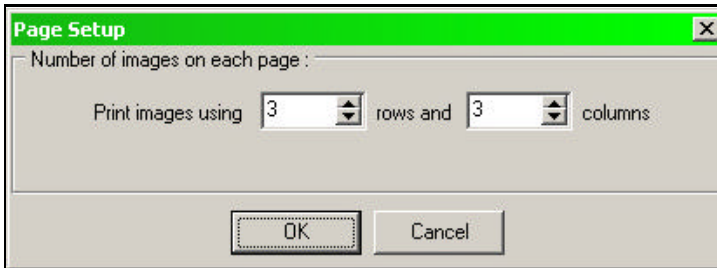


You can assign each camera a schedule on the **Edit Camera** dialog.

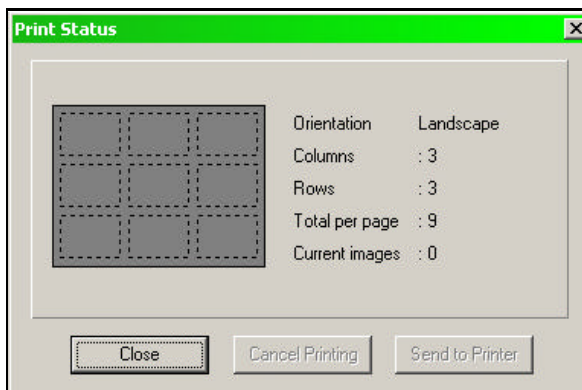
Printing

Netcam Watcher Professional includes a printing utility.

You can print up to **6** rows and **6** columns of pictures per page, allowing a maximum of **36** pictures per page. You select the page layout using the **Page Setup** dialog on the **Print** menu.



When printing, the page is filled left to right, top to bottom. When a page is full it is printed. You can see the current status of a page by using the **Print Status** dialog on the **Print** menu

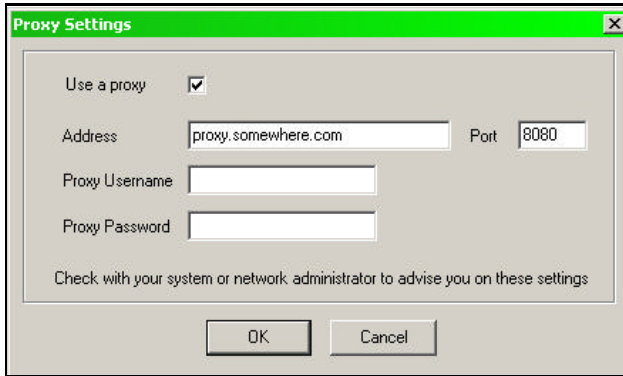


You can print pictures either from the current camera by using **Print Current Image** from the **Print** menu, or you can print frames from within the MJPEG player.

The **Print** menu also has options to print or cancel an incomplete page.

Proxy Setup

Netcam Watcher Professional can communicate using a *proxy server*. To set this up use **Proxy Setup** on the **File** menu.



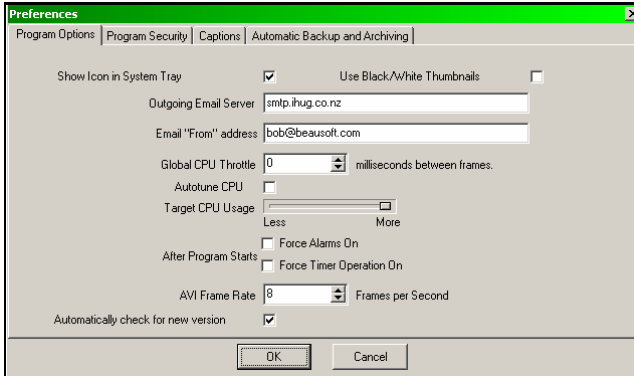
The image shows a 'Proxy Settings' dialog box with a green title bar. It contains a checkbox for 'Use a proxy' which is checked. Below this are four input fields: 'Address' (containing 'proxy.somewhere.com'), 'Port' (containing '8080'), 'Proxy Username' (empty), and 'Proxy Password' (empty). A note at the bottom of the input area says 'Check with your system or network administrator to advise you on these settings'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

Proxy Settings	
Use a proxy	<input checked="" type="checkbox"/>
Address	proxy.somewhere.com
Port	8080
Proxy Username	
Proxy Password	
Check with your system or network administrator to advise you on these settings	
OK	Cancel

Note that currently **Intellinet** and **VEO** cameras do not operate via a Proxy.

Preferences

Set program preferences and options using the **Preferences** dialog on the **File** menu.



- **Show Icon in System Tray:** The program minimizes to a small icon in the system tray.
- **Use Black/White thumbnails** For improved performance
- **Outgoing Email Server:** You need to specify an email (SMTP) server to use if you want to send e-mail alarms.
- **SMTP Username, SMTP Password:** Enter these here if your email server requires them. Otherwise leave blank.
- **Email From Address:** Used to identify outgoing email alarm messages.
- **Global CPU Throttle** Number of milliseconds paused between each frame received.
- **Autotune CPU:** If checked, Netcam Watcher will constantly monitor it's CPU usage and attempt to keep to the target CPU usage specified on the slider.
- **Minimum Darkness Level for Motion Detect** You can specify a value here for the lowest pixel value (1..255) that is considered for motion detection. Often cameras make excessive noise when there is little or no light and this can falsely trigger motion detection. Use a value here to prevent false alarms.
- **Force Alarms, Timer On:** If checked forces these buttons to be down on program start-up.
- **AVI frame rate:** When converting MJPEG to AVI this specifies the frame rate.

- ***Automatically check for new version:*** An automatic new version check is performed and you are notified on program shutdown if one is available.
- ***Use Joystick for Pan/Tilt/Zoom:*** If checked you can use a standard USB joystick for Pan/Tilt/Zoom functions. Use buttons 1 and 2 to zoom in and out.
- ***Use HKEY_LOCAL_MACHINE key:*** If checked this registry key will be used instead of HKEY_CURRENT_USER. This is useful if you want to run Netcam Watcher as a service as the run-as-service program and the normally run program will both use the same registry data. If you select this key it will prompt you to copy the current registry setup from the old to the new keys. Normally click **Yes**.
- ***MultiCam Display Rows and Columns-*** you can specify the number of rows and columns on the Multi Cam display. Maximum is 10 rows and 10 columns.

Security

Netcam Watcher Professional can be set up to require **Admin** and/or **User** passwords.

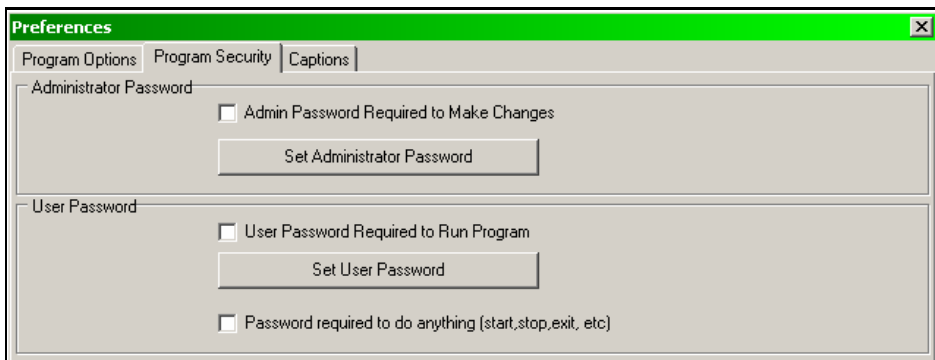
If an *Admin* password is set, the following functions require the *Admin* password to be entered:

- Editing Cameras or Motion Detection Masks
- Editing Schedules
- Editing Alarm Schedules
- Changing Preferences
- Changing Proxy Setup

If a **User** password is set then either this or the *Admin* password must be entered to run the program.

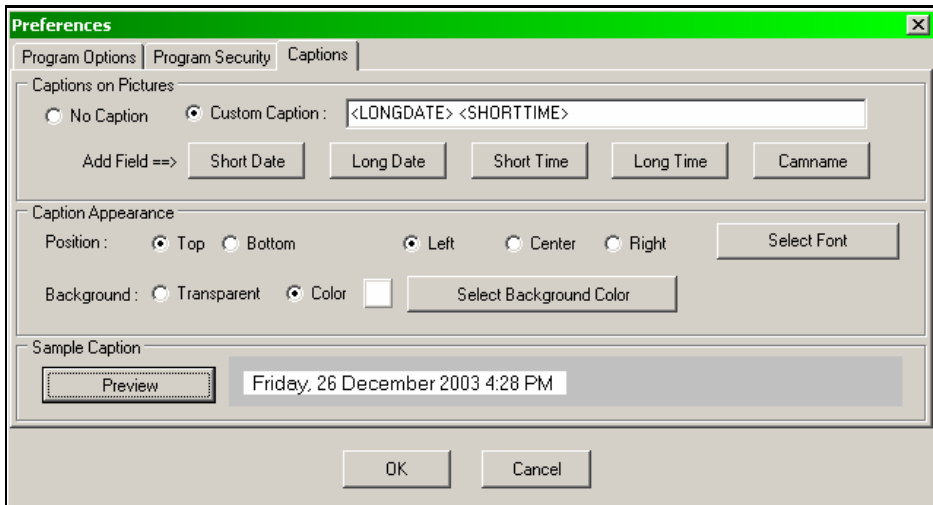
If **Password required to do anything** is checked then any action (including starting and stopping cameras, playing recordings or quitting the program) require a password.

Set and configure the Security settings on the **Program Security** tab on the global **Preferences** dialog.



Captions on Pictures

Netcam Watcher Professional can be set up to write captions onto pictures. The captions can contain the date and time stamps, camera name as well as fixed text. Use the **Captions on Pictures** dialog on the **File** menu.

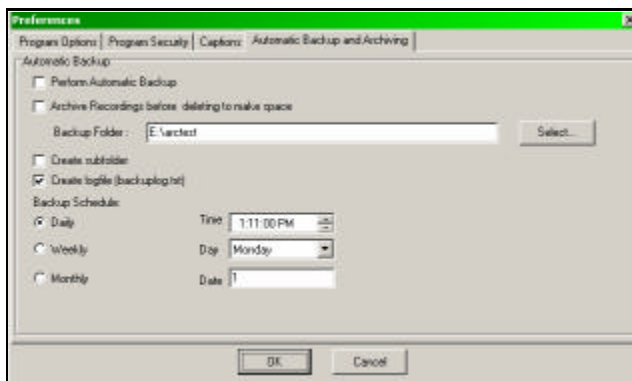


If you want to write a caption onto your pictures, select Custom Caption and enter the caption that you want into the edit box. You can click the buttons provided to enter fields such as dates and times.

Automatic Backups and Archiving

Netcam Watcher Professional can be set up to perform automatic backups of camera configurations and recordings. It can also archive recordings before deleting old recordings to make space for new ones.

To set this up, select **File > Preferences** and then click the **Automatic Backup** tab



This lets you specify whether you want Automatic Backups and/or Archiving. Also you can specify the location to back up (or archive) to.

This also lets you set the frequency, **Daily**, **Weekly** or **Monthly**, and various other settings.

Note that the Archiving function only controls whether files are saved prior to deleting them. It does not actually control when files are deleted. This is controlled on a per-camera basis on the Edit Cam dialog. You can specify here is files are deleted when a certain amount of disk space has been used or after a certain amount of time.

Remote Access

This tab lets you enable remote access using **Netcam Watcher Remote Control** software. You can set the following fields:

- **Allow Remote Client Access** : check this to enable Netcam Watcher to act as a server for Netcam Watcher Remote Control. If you check this you will need to restart the program. Also you may need to give Netcam Watcher permission with your firewall to act as a server.
- **Remote Access Port** : This is the port that Netcam Watcher will listen on. This needs to be the same as the port configured on Netcam Watcher Remote Control. If you are using a router and are using NAT you will need to “pass through” this port.
- **System Name**. Give a descriptive name for the system.
- **Description** : (Optional) A description of the system.
- **Remote Access Password**: This is the password that needs to be set in **Netcam Watcher Remote Control** to access this system.

Once you have configured remote access you can connect to this system using Netcam Watcher Remote Control. If you want to access the system from across the Internet you need to make sure that your router is configured to make this IP address and port visible.

Importing and Exporting Cameras

You can save your current camera definitions (i.e., the current cameras that you have configured) by using **Tools > Export Camera Definitions**. This creates a coded file with the default name **webcams.def**

You can also load cameras from a **.def** file, using **Tools > Import Camera Definitions**. In this case any cameras in the **def** file that you open are added to the current set of cameras.

Using FTP

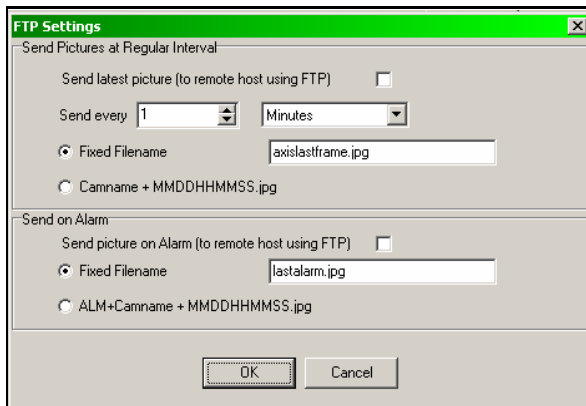
Netcam Watcher Professional can use **FTP** (File Transfer Protocol) to send cameras latest pictures and/or alarm pictures to a remote host. If the remote host is an Internet web server then you can then view these images from across the Internet.

There are two parts to getting this working. Firstly you configure the remote host by using File > FTP Settings

This opens a simple dialog that lets you specify details about the remote host:

- **Remote Host** e.g. www.myserver.com or 192.111.333.123
- **Username**
- **Password**
- **Remote Path** you can put the pathname here to store the pictures or leave blank for the default folder.
- **Alarm Remote Path** similar to Remote Path but for alarm images.
- **Use Passive Mode** often this works best if you have a firewall
- **Write FTP Log file** writes a log file to **FTPLOG.TXT** in the Netcam Watcher Program Folder.

The second part is set up on a per-camera basis, by clicking the **FTP** button on the Edit Camera dialog.



You can select whether to send pictures at regular intervals, or when an alarm occurs, also the frequency and filenames to use. You can also check a box to ensure that the camera returns to home position (preset #1) before a regular FTP.

Command Line Switches

If you want to automatically start *Netcam Watcher Professional* then it's often useful to be able to enable the timer, etc.

You can use a number of command line parameters to automatically start the Timer, enable the alarms, etc.

- **-TIMER** this enables the scheduler, like pushing the *Timer* button down
- **-ALARMS** this enables the Alarms, like pushing the *Alarms* button down
- **-AUTOSTART** starts all cameras
- **-MINIMIZE** runs the program minimized
- **-NOPASSWORD** skips initial password check. Useful when running as a service.

To use these parameters you must set up an extra shortcut to *Netcam Watcher Professional* and add the parameters to the end of the command line.

For example, a command line in a shortcut might look like this:

```
"E:\Program Files\BeauSoft\ncwpro\ncw.exe" -TIMER -MINIMIZE
```

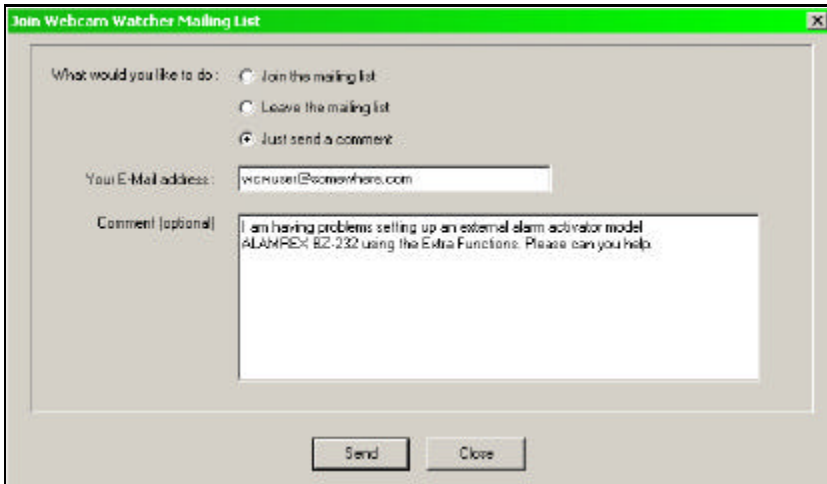
If you want *Netcam Watcher Professional* to start automatically when your system starts, put the shortcut into your **Startup** folder.

Alternatively, consider using AlwaysUp to run the program as a windows service.

Help and Support

Netcam Watcher Professional can send an email message directly to the support center. Use **Send Us a Comment** on the **Help** menu.

You can send technical support or other questions and we will get back to you as soon as possible.



The screenshot shows a dialog box titled "Join Webcam Watcher Mailing List". It contains three radio buttons under the heading "What would you like to do :". The first option is "Join the mailing list", the second is "Leave the mailing list", and the third, "Just send a comment", is selected. Below these is a text field labeled "Your E-Mail address:" containing the email "wcmuser@comenfans.com". Underneath is a text area labeled "Comment (optional)" containing the text "I am having problems setting up an external alarm activator model ALARMEX B2.232 using the Extra Functions. Please can you help?". At the bottom of the dialog are two buttons: "Send" and "Close".

You can also use this dialog to join our mailing list. This list is never shared with anyone. It is only used to give news about *Netcam Watcher Professional*.